

Mapping Fashion Items by Sales & Curated Content

Christian Bracher, Sebastian Heinz, and Roland Vollgraf • Zalando Research, Berlin, Germany

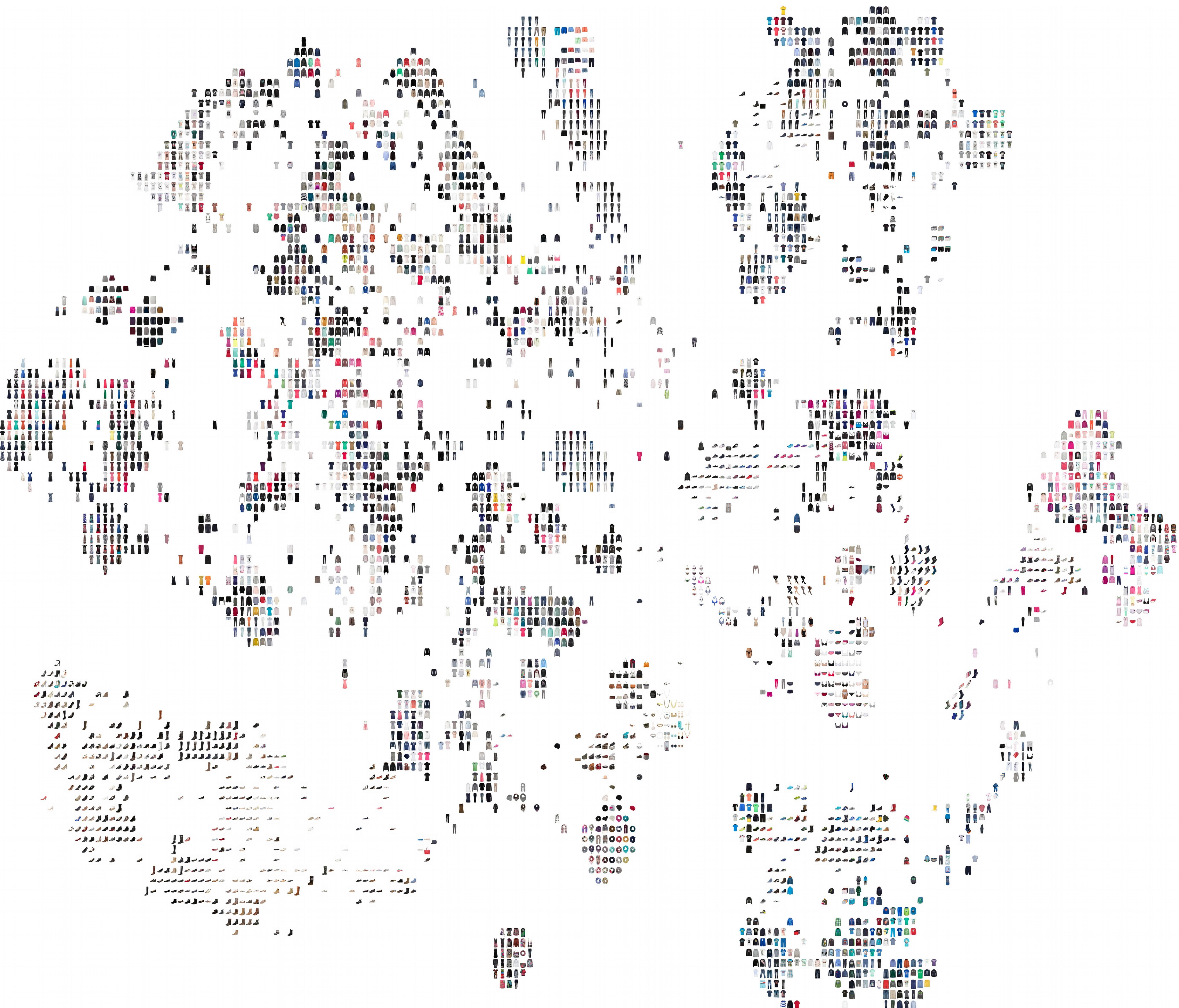
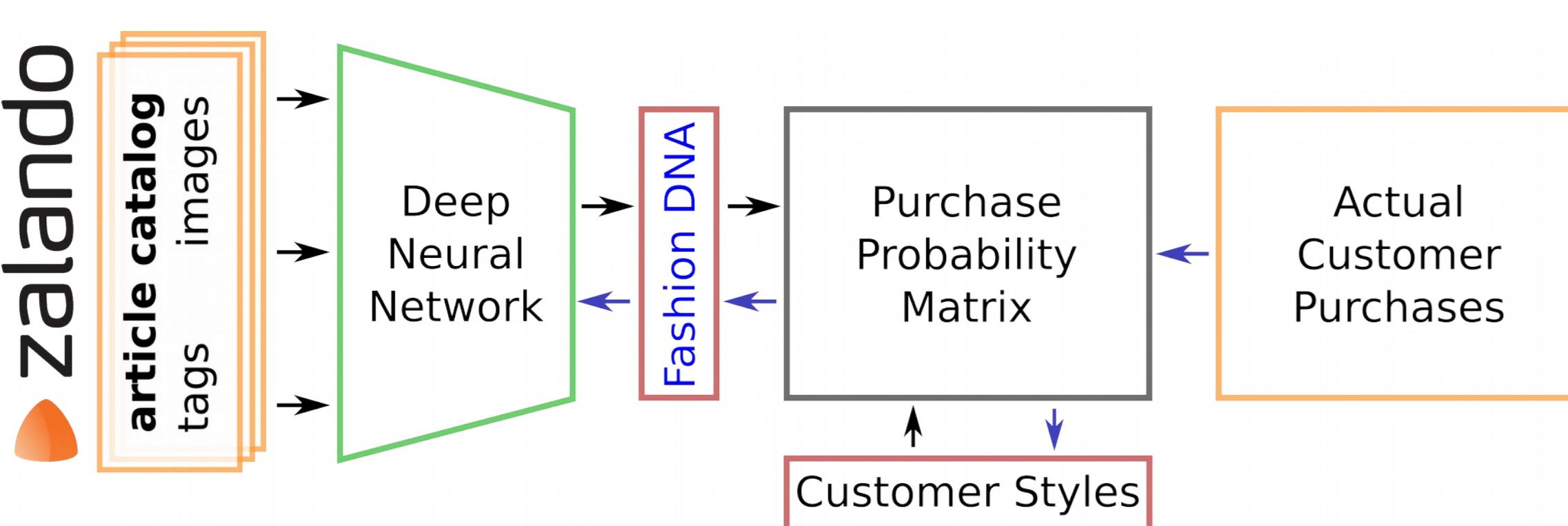


• The Data

- 1.3 million fashion items
- 30,000 frequent customers
- 3.5 million sales events

• The Model

- Items described by vectors embedded in a fashion space: **Fashion DNA**
- Customers are assigned dual style vectors
- Inner product as customer-item affinity
- Minimize logistic loss with respect to sales (logistic factorization model)
- **NEW:** Clamp Fashion DNA to curated article information (catalog images, tags) via **deep neural network**
- Motivation: Avoid recommendation cold start problem



• The Map

- t-SNE mapping of popular fashion items
- Based on **cosine similarity** of Fashion DNA
- Yields a structured fashion landscape